

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SANG-JIN LEE

Appeal No. 2002-1832
Application No. 09/318,980

ON BRIEF¹

Before RUGGIERO, BARRY, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-16, which are all of the claims pending in this application.

¹The Oral Hearing scheduled for August 21, 2003 was waived by appellant in a communication received, via facsimile, on August 21, 2003.

BACKGROUND

Appellant's invention relates to a computer including a memory having system information stored therein, and a repair system and method using a computer communications network. An understanding of the invention can be derived from a reading of exemplary claims 1 and 4, which are reproduced as follows:

1. A computer, comprising:

a central processing unit for processing application programs;

a first memory for storing programs which initialize and test the computer when the computer is turned on;

a second memory having system information stored therein;

a monitor for displaying information which is manipulated by the programs; and

a modem for transferring the stored system information to a host computer on a request of the host computer via a communication network.

4. A repair method for a computer, comprising the steps of:

connecting a user's computer to a host computer via a computer communication network;

transferring system information stored in a memory of the user's computer from the user's computer to the host computer upon a request of the host computer;

transferring a repair program according to the system information from the host computer to the user's computer; and

repairing the user's computer with the repair program.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Emerson et al. (Emerson)	5,438,528	Aug. 1, 1995
Bizzarri	5,732,268	Mar. 24, 1998

Claims 1, 2, 5, and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Emerson.

Claims 3, 4, and 7-16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Emerson in view of Bizzarri.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 14, mailed February 8, 2002) for the examiner's complete reasoning in support of the rejections, and to appellant's brief (Paper No. 13, filed December 10, 2001) and reply brief (Paper No. 16, filed April 2, 2002) for appellant's arguments thereagainst. Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR 1.192(a).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer. Upon consideration of the record before us, we reverse.

We begin with the rejection of claims 1, 2, 5, and 6 under 35 U.S.C. § 102(b). To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

We begin with independent claim 1. The examiner's position (answer, page 4) is that Emerson teaches the claimed computer system. The examiner relies upon the CPU of figure 4, the memory storing the BIOS, a monitor, and the modem of figure 5A for transferring system information to a host computer; see figure 4.

Appellant asserts (brief, page 8) that network expansion board (NEB) 2 acts as an intermediary between a plurality of LANs and a peripheral device such as a printer, and (reply brief, page 2) that NEB 2 is not a computer. It is argued (brief, page 6) that the examiner equates the NEB with appellant's computer in need of repair, and that the examiner turns to the whole LAN configuration to find any missing parts to reject appellant's claims. Appellant submits (brief, page 9) that NEB 2 of Emerson fails to include a monitor, as recited in claim 1. With respect to the examiner's assertion that 58 of Emerson is a modem, appellant points out that 58 of Emerson is a modem for a plurality of LANs, and not part of a single PC, as in appellant's claim 1. Appellant additionally points to table 1 of Emerson, which lists the major hardware elements of NEB 2, and argues that if NEB 2 included a monitor and modem, why aren't they listed in table 1? The examiner responds (answer, page 11) that the modem and monitor are shown in figures 1 and 2, and asserts (id.) that the modem transfers data among the PCS, server, and backbone network devices, including "displaying PCS devices."

From our review of Emerson, we find that Emerson is directed to testing an interactive circuit board in a LAN (col. 1,

lines 1-4). The invention relates to a circuit board which is coupled to a peripheral such as a printer. The prior art required a server for the printer (col. 1, lines 30-32). The circuit board eliminates the necessity of dedicating a personal computer to manage the peripheral (col. 1, lines 11-16). Figure 1 represents a LAN, and shows a Network Expansion Board (NEB) 2 coupled to printer 4 (col. 4, lines 27-30). The NEB provides functionalities that used to require a PC (col. 12, lines 10-12, col. 13, lines 1-10, and col. 6, line 55). Printer information is displayed on the administrator's PC 14 (col. 7, lines 38-43). In one aspect of the invention, the board is tested. After a power-on-self-test is completed, a test program is loaded onto the board. The test is executed and the results are outputted to a test computer, which will script additional tests in accordance with the test results. In addition, after rescripting further test modules, PC1 can locate the problem and debug NEB 2 (col. 56, 54-59). After completion of the test program, an operational program is downloaded onto the board and is loaded into an EPROM on the board (col. 2, lines 24-50). Information from the NEB 2 to the LAN is limited to printer status information (col. 13, line 62, and col. 21, line 68 through

col. 22, line 6. The network administrator's PC 14 includes a program that functions to initialize, configure and reconfigure the printer 4 attached to the NEB 2 (col. 15, lines 46-52). In addition, an LED failure/diagnosis light is provided on either the NEB or the printer (col. 17, line 15), and the NEB status is displayed on the administrator's PC (col. 18, lines 34-37). In addition NEB 2 is mounted in printer 4 (col. col. 1, line 38 and col. 10, line 58).

From the disclosure of Emerson, we find that NEB 2 is a network expansion board that is mounted inside printer 4 and is not a computer. We note that as shown in figure 3, microprocessor 108 is listed as including a "Reduced Instruction Set Computer (col. 8, lines 42 and 43). However, we find that 108 functions as a microprocessor, and in any event, is located in printer 4 and not in NEB 2. Thus, from the disclosure of Emerson, we find that NEB 2 is not a computer as asserted by the examiner. In addition, we find that NEB 2, which is located within printer 4, does not have a monitor or a modem. As shown in figure 3, NEB 2 connects to printer through a SCSI interface 100, and does not have a monitor. Although NEB 2 is disclosed as having an LED light, we find that an LED is not a monitor. Although the PCs in figure 1 are disclosed as having monitors, we

find no disclosure that NEB 2 has a monitor. In addition, we note that Emerson discloses that NEB 2 is directly connected to LAN 6 via LAN interface 101 (col. 8, line 28 and 29). Although the examiner is correct that the system includes modem 58, (figure 2) we find no disclosure in Emerson, and none has been pointed to by the examiner, that would teach or suggest connecting NEB 2 to the modem for transferring stored system information to a host computer on a request of the host computer, as required by claim 1. Moreover, although Emerson discloses plural PCS having monitors, Emerson is directed to control of the printer using the NEB to provide the functionality of a server PC, and does not disclose communication of system information from a network PC to the administrator's PC, upon request from the administrator's PC.

From all of the above, we find that the examiner has failed to establish a prima facie case of anticipation of claim 1. Accordingly, the rejection of claim 1, and claims 2, 5, and 6, which depend therefrom, under 35 U.S.C. § 102(b) is reversed.

We turn next to the rejection of claims 3, 4, and 7-16 under 35 U.S.C. § 103(a) as unpatentable over Emerson in view of Bizzarri. In rejecting claims under 35 U.S.C. § 103, it is

incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of

the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

We begin with independent claims 3 and 4. The examiner's position (answer, pages 6 and 7) is that Emerson does not explicitly teach "first and second modems on request of host computer" nor "a system repair program." To make up for these deficiencies in Emerson, the examiner turns to Bizzarri for a teaching of a computer system having a program used to diagnose and repair computer systems. The examiner asserts (answer, pages 6 and 7) that it would have been obvious to provide the method and apparatus for testing computers via a networking environment as disclosed by Emerson to include the computer repair or diagnosing program as taught by Bizzarri. According to the examiner, by utilizing this approach, any error occurring in the computer system can be identified, detected, corrected or repaired. The examiner further asserts (answer, page 15) that the use of a repair program is well known and does not require "undue experiment."

Appellant asserts (brief, pages 13 and 14) that Bizzarri is directed to telephone diagnostic and repair during the booting of

a computer running on BIOS. Appellant notes that claims 3 and 4 require transferring a repair program from a host computer to a user's computer, the repair program being based or according to system information sent from the user's computer to the host computer. It is argued that neither Emerson nor Bizzarri, taken singly or in combination, teach or suggest repairing a computer based on system information previously sent from the user's computer to the host computer. Appellant further argues that in Emerson, if NEB 2 fails, no repair is attempted. Appellant submits that the phrase "system information" should be read in light of the specification; i.e., to include keyboard, video card, modem, sound card, model and serial number of a computer, etc. It is further argued (reply brief, page 6) that Emerson does not repair anything, especially a computer, and that (reply brief, pages 6 and 7) Bizzarri teaches a second computer repairing a first computer when the first computer is in BIOS and cannot boot-up. Appellant asserts that because of the wide discrepancy between these two patents, there is no motivation to combine Bizzarri to make up for the deficiencies of Emerson. Appellant further asserts (reply brief, page 8) that even if combined, the references fail to teach or suggest transferring system information from a user's computer to a host computer, and

transferring a repair program from the host computer to the user's computer, with the repair program being based on or according to the system information sent previously from the user's computer to the host computer, as required by each of independent claims 3 and 4.

We note at the outset that the examiner's assertion regarding a lack of undue experimentation as a basis for combining the teachings of Emerson and Bizzarri is misplaced as "undue experimentation" applies to the issue of enablement and not to obviousness. Secondly, we do not agree with the examiner that combining the teachings of Emerson and Bizzarri would result in the repair of any error in the computer system, but rather would result in repair of errors relating to failure to boot-up upon turning on the computer.

In addition, we do not agree with appellant that the phrase "system information" should be construed to include language from the specification not found in the claim. As drafted in claims 3 and 4, any information sent by a computer to the host computer or network administrator's computer 14 in Emerson, can be considered to be system information. We decline to read into claims information not found therein. Further, we do not agree with appellant that Emerson does not teach repairing anything.

Emerson discloses that when NEB is in the download state, PC1 300 uploads programs to the NEB. As NEB 2 completes execution of each test program, it sends each test result back to PC1 300 for verification. If it is determined that an error has occurred, an error signal is output by PC1 300, which is indicated on the display of PC1 300. If the next checkpoint is not verified, PC1 300 rescripts the test by adding more detailed test modules, in accordance with the received result. In this manner, PC1 300 can locate the problem and debug NEB 2 (col. 56, lines 44-59). We find that Emerson's teaching of locating the problem and debugging NEB 2, to be a repair of NEB 2.

In Bizzarri, upon failure of a computer to boot, communication with a remote computer is established via a modem (col. 3, lines 50-55). An operator or automatic software at the second computer may repair a corrupted boot sector or modify code in the file allocation table (FAT) (col. 4, lines 39-42). As shown in figure 1, a PC 11 is connected to a diagnostic and repair facility 13. In one embodiment, a human operator directs all interaction with the PC needing repair. In another option, an automatic software kernel (AS) 24 is provided to deal with the problem of the failed PC (col. 5, lines 23-29). In the event an AS PC cannot fix the failed PC, it is passed on to a facility

with a human operator (col. 5, lines 52-54). An interface at the diagnostic PC emulates the keyboard, floppy drive and screen of the failed PC, providing a local environment at the diagnostic PC just as if the technician has traveled (miles away) to the failed PC. The technician will diagnose and repair the failed PC (col. 7, lines 32-49).

From the disclosure of Bizzarri, we find that Bizzarri is closer to the invention than is Emerson, who is directed to providing a network extension board to connect a printer to a LAN without the need for a server computer for the printer. As Bizzarri is directed to diagnosing and repairing computer problems that occur during running of BIOS, we find that a skilled artisan would have been motivated to combine the teachings of Bizzarri with Emerson, in order to repair network computers that did not boot-up. We find that the combined teachings of Emerson and Bizzarri do not meet the limitations of claims 3 and 4 because even though Emerson debugs NEB 2, Emerson does not disclose any repair of the network computers. In addition, Bizzarri does not make up for the deficiencies of Emerson with respect to claims 3 and 4 because even though the information sent to the diagnostic and repair computer may be considered to be system information, the system information that

the system will not boot-up is sent to the host or diagnostic computer at the request to the user's computer and not at the request of the diagnostic and repair computer, as required by claims 3 and 4. Thus, we find that Bizzarri does not make up for the deficiencies of Emerson.

From all of the above, we find that the examiner has failed to establish a prima facie case of obviousness of independent claims 3 and 4. Accordingly, the rejection of claims 3, 4, and claims 7-16 dependent therefrom, under 35 U.S.C. § 103(a) is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2, 5, 6, under 35 U.S.C. § 102(b) is reversed. The decision of the examiner to reject claims 3, 4, and 7-16 under 35 U.S.C. § 103(a) is reversed.

REVERSED

JOSEPH F. RUGGIERO)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
LANCE LEONARD BARRY)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
STUART S. LEVY)	
Administrative Patent Judge)	

Appeal No. 2002-1832
Application No. 09/318,980

Page 17

ROBERT E. BUSHNELL
1522 K STREET, N.W.
SUITE 300
WASHINGTON, DC 20005-1202